



John Lovell/R3/USEPA/US
02/17/2006 09:27 AM

To: jditty@msank.org
cc:
bcc:
Subject: Fw: New Kensington Local Limits

I meant to copy you on this e-mail to Julie Beck. She is with Castle Co-Packers, and asked for a copy of the new limits.

----- Forwarded by John Lovell/R3/USEPA/US on 02/17/2006 09:25 AM -----



John Lovell/R3/USEPA/US
02/17/2006 09:22 AM

To: j.beck30@verizon.net
cc:
Subject: New Kensington Local Limits

Attached is the Resolution No. 04-05 adopted by New Kensington which includes the revised local limits that we have proposed to approve. Note that I scanned the Resolution from hard copy, so it's possible that there is a typo or two. I did read through it and think that I caught all of the typos, but it's possible that I missed one or two. I did specifically check the limits listed, and those are correct.

The table of limits (second page) includes 4 columns. The surcharge limits are those levels that if exceeded, the discharger would be required to pay for the higher levels. These would not be considered violations, but payment would be required for the increased cost of treatment. Note that the surcharges are not part of the limits, and are not part of the approval, even though they are listed on the table. The next column (with subscripts (3) and (4)) are the limits that the Authority intends to enforce. An exceedance of any of these limits would be a violation, and would potentially subject the discharger to enforcement including fines or any other remedies allowed under local law. The last two columns are potential future limits that are not in effect now. These would only go into effect if the Authority decided to change its sludge disposal options (or had other reason to tighten the limits). However, if that happened, the Authority would need to provide you notice and revise your discharge permit, although no further public notice or approval would be required by EPA. My understanding is that the Authority currently has no plans to do this, but that could always change.

Hope this helps. Please let me know if you have any questions, or if you would like any additional information. You can also talk to the Authority about specific questions regarding their implementation of the limits.



New Kensington LL.doc



John Lovell/R3/USEPA/US

02/17/2006 09:22 AM

To j.beck30@verizon.net

cc

bcc

Subject New Kensington Local Limits

Attached is the Resolution No. 04-05 adopted by New Kensington which includes the revised local limits that we have proposed to approve. Note that I scanned the Resolution from hard copy, so it's possible that there is a typo or two. I did read through it and think that I caught all of the typos, but it's possible that I missed one or two. I did specifically check the limits listed, and those are correct.

The table of limits (second page) includes 4 columns. The surcharge limits are those levels that if exceeded, the discharger would be required to pay for the higher levels. These would not be considered violations, but payment would be required for the increased cost of treatment. Note that the surcharges are not part of the limits, and are not part of the approval, even though they are listed on the table. The next column (with subscripts (3) and (4)) are the limits that the Authority intends to enforce. An exceedance of any of these limits would be a violation, and would potentially subject the discharger to enforcement including fines or any other remedies allowed under local law. The last two columns are potential future limits that are not in effect now. These would only go into effect if the Authority decided to change its sludge disposal options (or had other reason to tighten the limits). However, if that happened, the Authority would need to provide you notice and revise your discharge permit, although no further public notice or approval would be required by EPA. My understanding is that the Authority currently has no plans to do this, but that could always change.

Hope this helps. Please let me know if you have any questions, or if you would like any additional information. You can also talk to the Authority about specific questions regarding their implementation of the limits.



New Kensington LL.doc

MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON
WESTMORELAND COUNTY, PENNSYLVANIA

RESOLUTION NO.04-05

A RESOLUTION PROVIDING FOR MODIFICATIONS TO THE MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON RULES AND REGULATIONS GOVERNING SEWAGE SERVICES TO INCLUDE LOCAL LIMITATIONS DEVELOPED PURSUANT TO THE INDUSTRIAL PRETREATMENT PROGRAM.

WHEREAS, the Municipal Sanitary Authority of the City of New Kensington desires to implement the provisions of the Federal Water Pollution Control Act (33 United States Code 1251 et seq.), the -Environmental Protection Agency General Pretreatment Regulations (40 Code of Federal Regulations, Part 403), and the Publicly Owned Treatment Works Penalty Law (Act No. 9 of 1992, 35 P.S. Section 752.1 et seq., effective April 26, 1992).

NOW, THEREFORE, BE IT RESOLVED by the Board of the Municipal Sanitary Authority of the City of New Kensington, Westmoreland County, Pennsylvania and it is hereby resolved is follows:

Purpose and Policy

This Resolution sets forth modifications to the Municipal Sanitary Authority of the City of New Kensington Rules and Regulations Governing Sewage Services to include Local Limitations developed pursuant to the Industrial Pretreatment Program for regulating Direct and Indirect contributors into the wastewater collection and treatment systems of the Municipal Sanitary Authority of the City of New Kensington (MSANK).

Modifications

Modification No. 1: This Resolution modifies Section 3.10 (n) of MSANK's existing Rules and Regulations Governing Sewage Services to replace existing wastewater Maximum Permissible Concentrations with Local Limitations developed pursuant to the MSANK Industrial Pretreatment Program.

Section 3.10 (n) shall be modified to read is follows:

"Wastes containing any of the following substances in solution in concentrations exceeding those shown in the following table:

Summary Table of Wastewater Discharge

Maximum Permissible Concentrations ⁽¹⁾

Parameter	Surcharge Limit ⁽²⁾	Local (Fine) Limit ^{(3) (4)}	Local (Fine) Limit ⁽⁵⁾	Local (Fine) Limit ⁽⁶⁾
Oil and Grease	100 mg/l	500 mg/l	500 mg/l	500 mg/l
Carbonaceous Biochemical Oxygen Demand (CBOD-5)	300 mg/l	729 mg/l	729 mg/l	729 mg/l
Total Suspended Solids	275 mg/l	771 mg/l	771 mg/l	771 mg/l
Ammonia	20.0 mg/l	-	-	-
Phosphorus	10.0 mg/l	-	-	-
pH ^{(7) (8)}		6.0-11.5 s.u.	6.0-11.5 s.u.	6.0-11.5 s.u.
Temperature (Fahrenheit)		150 degrees	150 degrees	150 degrees
Total Cyanide		0.15 mg/l	0.15 mg/l	0.15 mg/l
Copper		1.4 mg/l	1.4 mg/l	0.6 mg/l
Lead		2.31 mg/l	0.50 mg/l	0.16 mg/l
Zinc		3.0 mg/l	3.0 mg/l	1.56 mg/l
Chromium		13.1 mg/l	13.1 mg/l	13.1 mg/l
Hexavalent Chromium		2.3 mg/l	2.3 mg/l	2.3 mg/l
Nickel		0.72 mg/l	0.454 mg/l	0.454 mg/l
Cadmium		0.20 mg/l	0.063 mg/l	0.028 mg/l
Mercury		0.019 mg/l	0.019 mg/l	0.014 mg/l
Arsenic		0.110 mg/l	0.077 mg/l	0.037 mg/l
Silver		0.56 mg/l	0.56 mg/l	0.56 mg/l
Phenolics		1.0 mg/l	1.0 mg/l	1.0 mg/l
Molybdenum		-	0.085 mg/l	0.085 mg/l
Selenium		14.1 mg/l	0.079 mg/l	0.079 mg/l

(1) Maximum Permissible Concentrations developed pursuant to the Industrial Pretreatment Program, based on the Headworks Analysis for Local Limits Reevaluation report submitted to the U.S. Environmental Protection Agency on July 30, 2004 with subsequent revisions submitted on March 3, 2005 and July 6, 2005, as approved by the U.S. Environmental Protection Agency on July 21, 2005.

(2) A surcharge will be assessed any time the parameter exceeds the surcharge limit.

(3) A fine may be assessed any time the parameter exceeds the fine limit.

(4) Local Limits calculated using Uniform Concentration Limit methodology. Implementation to occur from January 2006 until such time that the Authority desires to change their method of sludge disposal, or local limits testing data indicates implementation of lower limits is warranted, or other conditions warrant a change in the limits during the time period until the next headworks re-evaluation is conducted.

(5) Local Limits calculated using Uniform Concentration Limit methodology incorporating Non-Exceptional Quality sludge criteria. Limits to be implemented at such time as warranted by the Authority's method of sludge disposal or local limits testing data indicates implementation of lower limits is warranted, or other conditions warrant a change in the limits during the time period until the next headworks re-evaluation is conducted.

(6) Local Limits calculated using Uniform Concentration Limit methodology incorporating Exceptional Quality sludge criteria. Limits to be implemented at such time as warranted by the Authority's method of sludge disposal or local limits testing data indicates implementation of lower limits is warranted, or other conditions warrant a change in the limits during the time period until the next headworks re-evaluation is conducted.

(7) Standard Units

(8) The pH limitations shall be modified to include a Short Term Exceedance Exemption for Effluent Limitations under Continuous Monitoring in accordance with Section 3.10 (c)(1).

Modification No. 2:

Section 3.10 (c) shall be modified to increase the maximum allowable pH concentration from 9.0 standard units to 11.5 standard units, and to add a pH Limit Exceedance Policy. Section 3.10 (c) shall now read:

"Any waters or wastes having a pH lower than 6.0 or higher than 11.5 standard units, or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works. The Authority may require installation and maintenance, where necessary, of suitable equipment to continuously measure and record the pH of wastes discharged."

Section 3.10 (c) shall be modified to include a Short Term Exceedance Exemption for Effluent Limitations under continuous Monitoring. Section 3.10 (c)(1) shall now read:

Short-Term Exceedance Exemption for Effluent Limitations under Continuous Monitoring

a) Where a permittee continuously measures the pH of its wastewater discharge, pursuant to a requirement in a pretreatment permit, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable pretreatment permit; except excursions from the range are permitted subject to the following limitations:

1) The total time during which the pH values are outside of the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month, and

2) No individual excursion from the range of pH values shall exceed 60 minutes.

b) This short-term exceedance exemption does not allow for any discharges below pH 5.0 S.U. for any period of time, since this is a national prohibition on pH discharges.

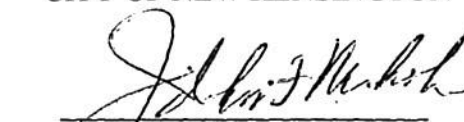
c) This short-term exceedance exemption does not allow for any discharges equal to, or above pH 12.5 S.U. for any period of time.

d) For purposes of this section, an excursion is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the applicable pretreatment permit.

This Resolution shall be in full force and effect immediately after its passage and approval by the Municipal Sanitary Authority of the City of New Kensington.

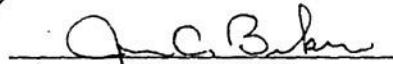
ADOPTED as a Resolution this 21 day of November 2005.

MUNICIPAL SANITARY AUTHORITY
OF THE
CITY OF NEW KENSINGTON



CHAIRMAN

ATTEST



SECRETARY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

FEB 3 2006

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: NPDES No. PA0027111
Public Notice Number PA-299-JML

Dear Mr. Ditty:

Enclosed is a copy of the Public Notice detailing the Environmental Protection Agency's (EPA) intention to approve modifications to your pretreatment program, including local limits, in accordance with Section 403.11 of the General Pretreatment Regulations. Also enclosed is a listing of the specific documents to be included in the public notice. If you disagree with any of the listings, or if any documents have been omitted, please let me know as soon as possible. After completion of the 30-day comment period, you will be notified of EPA's decision to approve or disapprove these modifications.

Thank you for your cooperation. If you have any questions, please do not hesitate to contact me at 215-814-5790.

Sincerely,

A handwritten signature in black ink that reads "John Lovell". Below the signature, the name "John Lovell" is printed in a red, sans-serif font.

Pretreatment Coordinator

Enclosures

cc: Stephen Balta, PADEP Southwest Region (w/enclosures)
Carl Bender, N.A. Water Systems (w/enclosures)

Customer Service Hotline: 1-800-438-2474

Documents Included in Pretreatment Program Modification Approval
Public Notice Number PA-299-JML

- Municipal Sanitary Authority of the City of New Kensington Resolution No. 04-05, adopted November 21, 2005.
- Headworks Analysis for Local Limits Reevaluation, dated July 2004, as revised March 2005 (Response to USEPA Review Letter) and July 6, 2005 (letter amending March 2005 submission).

PUBLIC NOTICE

Environmental Protection Agency Region III
Office of Municipal Assistance (3WP24)
1650 Arch Street
Philadelphia, PA 19103-2029

Public Notice Number: PA-299-JML

Public Notice Date: FEB 10 2006

The following Publicly Owned Treatment Works (POTW), has requested approval of modifications to its approved pretreatment program:

Name and Address of Applicant (Permittee)

The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

NPDES Permit Number: PA0027111

Receiving Stream: Pucketa Creek

Procedures for Final Determination

The Environmental Protection Agency, Region III, is issuing the following notice of proposed action under the Clean Water Act, as amended, and implementing regulations.

The permittee has requested approval of modifications to a POTW pretreatment program in accordance with the requirements of 40 CFR 403.18 and the request is being public noticed by the EPA in accordance with 40 CFR 403.11. The modifications to the permittee's pretreatment program include revised local limits.

The program modifications submission is available for inspection and copying at the Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103-2029. Further information may be obtained by writing to the above address or by calling John Lovell at 215-814-5790.

Persons wishing to submit comments or object to the EPA approval of the above POTW pretreatment program modifications, or to request a public hearing pursuant to the Federal Water Pollution Control Act, must submit their comments or request in writing within thirty (30) days of the date of this notice to the above EPA address. If no comments to this notice are received, the proposed pretreatment program modifications referenced above will be approved without changes and without further public notice. In such event, this notice shall constitute the "notice of approval or disapproval" required by 403.11(e) and no additional notice shall be provided. Anyone who wishes to be given a notice of approval or disapproval of the modifications should send a request for such notice to the above EPA address.



John Lovell/R3/USEPA/US
01/05/2006 09:55 AM

To "Bender, Carl" <carl.bender@veoliawater.com>
cc
bcc
Subject Re: City of New Kensington

We will be processing the paperwork to publish the public notice on the New Kensington local limits revisions in the next week or so. That means that the actual publication will probably occur in the next 2 - 4 weeks. I will copy you on the letter to the Authority which will include the language of the public notice and the date it is to be published. The comment period will be 30 days from the date of publication. If you are interested in reviewing and/or commenting on the submission, I would encourage you to talk to the Authority, although all or any part of the Authority's submission would be available at our office as well.

Please feel free to contact me if you have any questions.
"Bender, Carl" <carl.bender@veoliawater.com>



"Bender, Carl"
<carl.bender@veoliawater.com>
12/29/2005 10:34 AM

To John Lovell/R3/USEPA/US@EPA
cc
Subject City of New Kensington

Mr. Lovell:

One of our clients discharges to the City of New Kensington POTW and recently received a notice that the local limits would be changing. I understand that your office will be offering a comment period on the changes in the near future. Please let me know if that comment period has begun and, if not, how I can find out when it does begin.

Thank you.

Carl F. Bender, P.E.

Principal - Industrial Consulting

N.A. Water Systems
Airside Business Park
250 Airside Drive
Moon Township, PA 15108
Ph. (412) 809-6637
Fax: (412) 809-6711

E-mail: carl.bender@veoliawater.com

WATER - WASTEWATER - AIR - HYDROGEOLOGY

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***** This
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contain confidential information. If you are not one of the intended recipients, please do not
duplicate or forward this e-mail message and immediately delete it from your computer. If you
received this email in error, please notify postmaster@veoliawater.com



**Hatch Mott
MacDonald**

Gateway View Plaza, 1600 W. Carson St.
Pittsburgh, PA 15219-1031
T 412.497.2900 www.hatchmott.com

299

27111

December 13, 2005

Mr. John Lovell, Pretreatment Coordinator
U.S. Environmental Protection Agency - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**RE: Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation
Adoption of Resolution No. 04-05**

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission is intended to advise you that MSANK adopted Resolution 04-05 at their monthly meeting on November 21, 2005. This resolution modified the MSANK rules and regulations to include revised local limits developed as part of the Headworks Analysis for Local Limits Reevaluation. The solicitor for MSANK forwarded notification letters, dated December 1, 2005, to each of the four contributing municipalities advising that MSANK adopted the referenced resolution to modify their rules and regulations. An executed copy of the resolution and copies of the notification letters are enclosed.

If you have any questions regarding this matter, please contact me.

Sincerely,

Hatch Mott MacDonald

Linda French

Linda French
Project Scientist
T 412.497.2912 F 412.497.2901
Linda.French@hatchmott.com

Enclosure

cc: Joseph Ditty – MSANK
Daniel H. Rowe, Jr. – MSANK
Aaron Kress – Solicitor
Stephen B. Polen, P.E. – HMM
File: P:\212330_AA01_MSANK\WPDOCS\009.iw.ldf_121305.doc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

NOV 25 2005

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Ditty:

I have reviewed the draft resolution to adopt the local limits and pH revisions submitted on September 27, 2005 (and revised on September 28, 2005) by your consultant, Ms. Linda French. As noted in my e-mail of October 17, 2005, the draft resolution is acceptable, although I would recommend one revision.


The draft resolution proposes to modify Section 3.10(c)(1) to provide for short term exceedances of pH. Section 3.10(n) of the draft resolution prohibits discharges that exceed the limits listed, including limits for pH. In order to avoid any potential confusion, I recommend that the pH limit listed in the table in Section 3.10(n) include a footnote that references the short term exceedances allowed in section 3.10(c)(1).

Ms. French's letter also addressed the issue of the need for adoption of the resolution by the various municipalities covered by the Authority's pretreatment program before the new limits could be approved. After review of the current municipal ordinances, I believe that adoption of the resolution by the municipalities will not be needed at this time. The municipal ordinances allow the Authority to develop and adopt local limits for the protection of the system. The limits adopted by the Authority should be enforceable when included in the permits issued to the industrial users. In regard to pH, the municipal ordinances include a prohibition on pH discharges below 5.0 standard units. While the Authority's pH limit is different than the limit listed in the municipal ordinances, it is more restrictive, and since it is listed in the local limits table, should be enforceable as a local limit. However, to ensure that the short term exceedances are allowed under the municipal ordinances, it would be best to ensure that the availability of the exceedances is noted in the limits table as suggested above. In addition, although we will not require that the municipal ordinances be revised at this time, I would recommend that the next time that the municipal ordinances are amended, the pH provision in each ordinance be amended to mirror Section 3.10(c) of the Authority's regulations.

Customer Service Hotline: 1-800-438-2474

Please provide a signed copy of the adopted resolution when it is available. As noted in my letter of July 21, 2005, the approval of the new limits will be processed as a substantial program modification, and EPA will issue a public notice prior to approval. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,



John Lovell
Pretreatment Coordinator

cc: Stephen Balta, PADEP Southwest Region



John Lovell/R3/USEPA/US
10/17/2005 01:45 PM

To "French, Linda D" <Linda.French@hatchmott.com>
cc jditty@msank.org
bcc
Subject Re: MSANK pretreatment resolution

I looked at the draft resolution, and it looks OK to me, but I'd suggest one revision. Since pH is listed in the local limits table as 6 - 11.5 but without the short-term excursions, I would also reference 3.10(c)(1) in the footnote (or in a separate footnote) to ensure that there is no confusion about the excursion being allowed. I think that also helps with the municipal ordinances by clearly making the excursions part of the local limits (see below).

As far as the pH provision goes, here's what I think. The municipal ordinances prohibit wastes with a pH of less than five. This is the same as the limit that is in the Authority's current Regulations, but is apparently more restrictive than the Authority's limit that it has been imposing through the permits. The revision to the Authority's pH provision, even with the excursions, makes it more stringent than what is in the ordinances, so the municipal ordinances don't create a problem from that perspective. Since the pH limit is listed in the local limits section, it is probably incorporated into the municipal ordinances through the local limits language of Section 2.4 of the ordinances. So therefore, I'd say that revision of the municipal ordinances is not absolutely necessary. On the other hand, I do think that it would be better to have the pH provision in the municipal ordinances changed to avoid any potential confusion. Bottom line is that we won't require that the ordinances be changed for this revision, but if the ordinances are ever being changed in the future (e.g., incorporation of streamlining changes), then the pH provision should be changed to mirror the Authority's Regulations.

Let me know if you have any questions. I'll send a letter as a follow-up, but wanted to get this out to you because of the potential adoption tonight.

"French, Linda D" <Linda.French@hatchmott.com>



"French, Linda D"
<Linda.French@hatchmott.com>
10/17/2005 09:27 AM

To John Lovell/R3/USEPA/US@EPA
cc jditty@msank.org
Subject MSANK pretreatment resolution

John:

I located the following reference regarding our discussion of the pH limitation in the pretreatment ordinances applicable to the contributing municipalities in MSANK.

In Section 2 - Regulations, Subsection 2.1- General Prohibitions, Item c statesany wastewater having a pH less than 5.0, unless the POTW is specifically designed to accomodate such wastewater , or watewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the POTW.

I thought this might be helpful for your determination as to whether MSANK can simply adopt their proposed resolution and notify each municipality or whether each municipality's ordinance needs to be updated so as not to conflict with the pH policy in the proposed resolution.

Thanks,

Linda

Attention:

This e-mail and any files transmitted with it from Hatch Mott MacDonald are confidential and intended solely for use of the individual or entity to whom they are addressed. If you have received this e-mail in error please immediately notify the sender.

September 28, 2005

Mr. John Lovell, Pretreatment Coordinator
U.S. Environmental Protection Agency - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**RE: Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation
Draft Resolution - Amendment**

Dear Mr. Lovell:


On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission is intended as an amendment of the draft resolution that was submitted for your review on September 27, 2005.

The amendment applies to Item C of the Short-Term Exceedance Exemption for Effluent Limitations Under Continuous Monitoring section of the resolution. This item formerly read "This short term exceedance exemption does not allow for any discharges above pH 12.5 s.u. for any period of time." In order to eliminate any potential conflict with hazardous waste criteria, MSANK desires to add the words "*equal to, or*" prior to the word "above" in this item. The amended item now reads "This short term exceedance exemption does not allow for any discharges equal to, or above pH 12.5 s.u. for any period of time."

A copy of the amended draft resolution is attached for your review. If you have any questions regarding this matter, please contact me.

Sincerely,

Hatch Mott MacDonald



Linda French
Project Scientist
T412.497.2912 F412.497.2901
Linda.French@hatchmott.com

Attachment

cc: Joseph Ditty – MSANK
Daniel H. Rowe, Jr. – MSANK
Aaron Kress – Solicitor
Stephen B. Polen, P.E. – HMM
File: P:\218551AA01_MSANK 2005 PRETREATMENT\WPDOCS\009.iw.Idf_092805.doc



September 27, 2005

Mr. John Lovell, Pretreatment Coordinator
U.S. Environmental Protection Agency - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**RE: Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation
Draft Resolution**

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission is intended to respond to your request to review a copy of the draft resolution prepared for MSANK to adopt the revised local limits approved by the U.S. Environmental Protection Agency (EPA) on July 21, 2005. A copy of the draft resolution is attached for your review.

The Pretreatment Ordinances (adopted in 1996) currently in effect between MSANK and the contributing municipalities of New Kensington, Lower Burrell, Plum and Arnold do not contain numeric limits, rather the MSANK rules and regulations are incorporated by reference. Within each ordinance, Section 2.4-Specific Pollutant Limitations states "*No person shall discharge wastewater containing pollutants in excess of the maximum amounts specified in then current rules and regulations governing sewerage service of the Municipal Sanitary Authority of the City of New Kensington*". Based on this clause, it appears that the enforceability of the limits would not be affected by MSANK adoption of the new resolution. Therefore, it does not appear necessary for each municipality to adopt the limits through a revised pretreatment ordinance.

MSANK intends the following course of action to enable EPA to initiate the public notice period associated with updating the MSANK pretreatment program. Upon receipt of EPA approval, MSANK will adopt the resolution thereby modifying their rules and regulations. MSANK will then forward a copy of the adopted resolution to each contributing municipality along with a cover letter that notifies the municipality that the rules and regulations have been amended to incorporate revised limitations and the wastewater contributed by each municipality must meet the revised limitations adopted by MSANK. Copies of the adopted resolution and letters to the municipalities will then be forwarded to EPA.

Thank you for your review of the draft resolution and proposed course of action. Following receipt of EPA approval, MSANK intends to adopt the resolution at their monthly meeting on October 17, 2005.



Hatch Mott
MacDonald

If you have any questions regarding this matter, please contact me.

Sincerely,

Hatch Mott MacDonald

Linda French

Linda French

Project Scientist

T 412.497.2912 F 412.497.2901

Linda.French@hatchmott.com

LDF/iw

Attachment

cc: Joseph Ditty – MSANK
Daniel H. Rowe, Jr. – MSANK
Aaron Kress – Solicitor
Stephen B. Polen, P.E. – HMM
File: P:\218551AA01_MSANK 2005 PRETREATMENT\WPDOCS\008.iw.ldf_092705.doc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

SEP 08 2005

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Ditty:

I have reviewed the August 3, 2005 letter from your consultant, Ms. Linda French, regarding the short-term pH exceedance policy. Based on my review of the letter, the exceedance policy is acceptable. Note that to be enforceable and eliminate the short-term pH exceedances as violations, the pH exceedance policy must be included in the Authority's Rules and Regulations. If the policy is not included in the Rules and Regulations, then short-term exceedances would continue to be violations, although the policy could be incorporated into the enforcement response plan (ERP), and the ERP could then allow for limited or no enforcement response for these pH exceedances.

If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,

A handwritten signature in black ink, appearing to read "John Lovell".

John Lovell
Pretreatment Coordinator

cc: Stephen Balta, PADEP Southwest Region



August 3, 2005

Mr. John Lovell, Pretreatment Coordinator
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**RE: Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation Report
Response to USEPA Review Letter
Revision to Short-Term pH Exemption**

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission is intended to respond to your letter dated July 21, 2005 regarding the short-term pH exemption policy proposed in the Headworks Analysis for Local Limits Reevaluation report submitted on July 20, 2004 with revisions submitted on March 3, 2005 and July 6, 2005.

Your letter recommended that the policy be revised to place an upper limit on the pH exemption by not allowing any discharges with a pH above 12.5 s.u. for any length of time. Based on your recommendation, the policy has been revised. This submission is intended to respond to your request to review a draft of the policy prior to adoption by MSANK.

pH Limit Exceedance Policy-Revised August 2005

Short-Term Exceedance Exemption for Effluent Limitations under Continuous Monitoring

a) Where a permittee continuously measures the pH of its wastewater discharge, pursuant to a requirement in a pretreatment permit, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable pretreatment permit, except excursions from the range are permitted subject to the following limitations:

- 1) The total time during which the pH values are outside of the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month, and
- 2) No individual excursion from the range of pH values shall exceed 60 minutes.





b) This short-term exceedance exemption does not allow for any discharges below pH 5.0 S.U. for any period of time, since this is a national prohibition on pH discharges.

c) This short-term exceedance exemption does not allow for any discharges above pH 12.5 S.U. for any period of time.

d) For purposes of this section, an excursion is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the applicable pretreatment permit.

Thank you for your consideration of this revised policy. Please provide comments on the revised policy at your earliest convenience in order that MSANK may proceed with the local limit approval process. If you have any questions regarding this matter, please contact me.

Sincerely,

Hatch Mott MacDonald

A handwritten signature in blue ink that reads "Linda French".

Linda French
Project Scientist
T412.497.2912 F412.497.2901
Linda.French@hatchmott.com

LDF:jem
Attachments

Cc: Joseph Ditty – MSANK
Daniel H. Rowe, Jr. – MSANK
Aaron Kress – Solicitor
Stephen B. Polen, P.E. – HMM
File:P:\218551AA01_MSANK 2005 PRETREATMENT\WPDOCS\006.jem.ldf_080305.doc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

JUL 21 2005

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Ditty:

I have completed review of the Authority's revised local limits reevaluation submitted on March 3, 2005, as well as the supplemental information submitted on July 6, 2005. Based on my review, the proposed revisions to the local limits are acceptable. Enclosed are two tables showing the revised influent and effluent goals based on the new reevaluation. These influent and effluent goals will be used for future data evaluations done at the time of the annual report review. The Authority should ensure that its quarterly pretreatment monitoring at the treatment plant includes all of these pollutants.

Please note that the influent goal for zinc has been revised somewhat from the Authority's submission. Because the maximum allowable headworks loading for zinc is based on prevention of inhibition, the influent goal for zinc in the enclosed table is based on the highest observed influent value reported by the Authority in its annual reports (0.559 mg/l in March 2003). This revised influent goal is based on the assumption that no treatment plant inhibition occurred at this influent concentration. Please let me know if this assumption is not correct.

In general, the Authority's proposed limits are equal to or more stringent than the existing local limits. However, the proposed limit for pH is less stringent than the existing limit, and therefore the modification to the local limits is considered a substantial program modification under 40 CFR 403.18. That means that prior to formal approval of the proposed limits, EPA must conduct a public notice period. Before the public notice period can begin, the Authority must adopt the proposed limits, and have them adopted by all of the municipalities served by the Authority's treatment plant. Upon submission of the adopted regulations and ordinances, we will be able to begin the public notice period. Note that the Authority's NPDES permit requires adoption of the proposed limits within four months of acceptance of the limits by EPA (the date of this letter). Within the same four month period, the Authority must also provide notification to the municipalities served by the treatment plant of their need to adopt the limits as well.

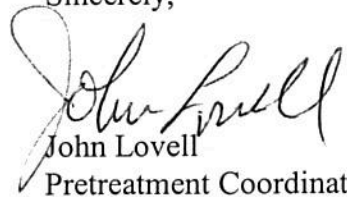
The proposed revisions to the local limits include a short-term pH exemption. Since the

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wording of this provision could impact the approvability of the exemption, I would like to see a draft of the language prior to adoption by the Authority. In order to do this and still allow for adoption by the Authority within the four month time frame, the proposed language for the revision should be submitted in the very near future. Although not required, it is suggested that the Authority place an upper limit on the pH exemptions by not allowing any discharges with a pH above 12.5 for any length of time. While not referenced in the General Pretreatment Regulations, a pH above 12.5 is defined as a corrosive hazardous waste, and we generally recommend that POTWs prohibit discharges above this level.

As noted above, please provide a draft of the local limits language prior to adoption. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,



John Lovell
Pretreatment Coordinator

Enclosure

cc: Stephen Balta, PADEP Southwest Region (w/o enclosure)



July 6, 2005

Mr. John Lovell, Pretreatment Coordinator
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**RE: Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation Report
Response to USEPA Review Letter
Amendment**

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission is intended as an amendment of the Headworks Analysis for Local Limits Reevaluation-Response to USEPA Review Letter submission dated March 3, 2005. That submission responded to the USEPA review letter dated November 26, 2004, regarding the Headworks Analysis for Local Limits Reevaluation report submitted on July 30, 2004.

Based on recent discussions between the MSANK Board and an industrial user, MSANK desires to amend the latest submission as follows.

Clean Sludge Criteria

The March 3, 2005 submission requested EPA approval of three sets of limits calculated using the Uniform Concentration Limit method. These limits were listed in Table 2 of that submission, a copy of which is attached. The first set of limits, (proposed for Years 2006-2007) were calculated without using any sludge land application criteria. The second set of limits, (proposed for Year 2008) were calculated using non-exceptional quality land application criteria and the third set (proposed for Years 2009-2015) were calculated using exceptional quality land application criteria.

It was understood from our June 6, 2005 telephone conversation that if an Authority is not currently land applying their sludge and has no immediate plans to do so, the Authority is not required to adopt limits that were calculated with consideration to sludge land application criteria. While MSANK recognizes that land application criteria should be considered as part of the headworks analysis so as not to limit options for sludge disposal in the future, the current method of sludge disposal is in a landfill. Based on the current disposal status, MSANK desires to adopt and implement limits that were calculated without consideration to land application criteria. While approval of the limits calculated using non-exceptional quality and exceptional quality sludge is still requested, MSANK desires to delay implementation of these limits until such time that MSANK is ready to discontinue landfill disposal of the sludge, or the MSANK local limits testing data indicates implementation of the lower limits is warranted.



Zinc

The March 3, 2005 submission proposed a Zinc limit of 2.77 mg/l, which was calculated without consideration of clean sludge criteria. This limit is significantly lower than the existing zinc limit of 34.7 mg/l. In order to ease the transition for the industrial users, MSANK desires to implement a zinc limitation of 3.0 mg/l instead of a limitation of 2.77 mg/l.

Total Cyanide

The March 3, 2005 submission proposed a Total Cyanide limit of 0.17 mg/l, based on the revised model run that incorporated criteria recommended by USEPA in the November 26, 2004 review letter. The MSANK existing local limit for Cyanide is 0.15 mg/l. MSANK proposes to retain the existing cyanide limitation of 0.15mg/l instead of adopting the 0.17 mg/l limit generated by the model.

Request for EPA Approval

The limitations requested for EPA approval are listed in Table 2A, attached. Approval of all three sets of limits is requested with the understanding that the first set of limits will remain in effect until such time that the Authority desires to change their method of sludge disposal, or local limits testing data indicates implementation of the lower limits is warranted. The limits calculated using non-exceptional quality and exceptional quality sludge criteria would be implemented as necessary, rather than on a strict calendar year basis, during the time period until the next headworks reevaluation is conducted.

Thank you for your consideration of these amendments. If you have any questions regarding this matter, please contact me.

Sincerely,

Hatch Mott MacDonald

Linda French

Linda French

Project Scientist

T412.497.2912 F412.497.2901

Linda.French@hatchmott.com

Attachments

Cc: Joseph Ditty – MSANK
Daniel H. Rowe, Jr. – MSANK
Aaron Kress – Solicitor
Stephen B. Polen, P.E. – HMM

Mr. John Lovell Page 2 7/6/2005

Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation

Table 2

UCL Local Limits Revised Per EPA Review - March 2005

Parameter	Units	Existing Fine Limit	Local Limits Requested for Years 2006-2007 UCL Limits Calculated Using No Sludge Criteria	Local Limits Requested for Year 2008 UCL Limits Calculated Using Non-Exceptional Quality Sludge Criteria	Local Limits Requested for Years 2009-2015 UCL Limits Calculated Using Exceptional Quality Sludge Criteria
Ammonia-Nitrogen	mg/l	-	-	-	-
Arsenic	mg/l	0.194	0.110	0.077	0.037
Cadmium	mg/l	0.2	0.20	0.063	0.028
Total Chromium	mg/l	15	13.1	13.1	13.1
Hexavalent Chromium	mg/l	6.65	2.3	2.3	2.3
Copper	mg/l	3.4	1.4	1.4	0.6
Total Cyanide	mg/l	0.15	0.17	0.17	0.17
Lead	mg/l	2.31	2.31	0.50	0.16
Mercury	mg/l	0.019	0.019	0.019	0.014
Molybdenum	mg/l	-	-	0.085	0.085
Nickel	mg/l	1.68	0.720	0.454	0.454
Phenolics	mg/l	1	1	1	1
Selenium	mg/l	-	14.1	0.079	0.079
Silver	mg/l	1.38	0.56	0.56	0.56
Zinc	mg/l	34.7	2.77	2.77	1.56
Total Suspended Solids	mg/l	771	771	771	771
CBOD5	mg/l	729	729	729	729
pH	s.u.	6.0-9.0	6.0-11.5	6.0-11.5	6.0-11.5
Temperature	Deg. F	150 F	150 F	150 F	150 F
Oil and Grease	mg/l	500	500	500	500
Total Petroleum Hydrocarbons	mg/l	-	-	-	-
Phosphorus	mg/l	-	-	-	-

UCL = Uniform Concentration Limit



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Municipal Sanitary Authority of the City of New Kensington
Headworks Analysis for Local Limits Reevaluation
UCL Local Limits Requested for EPA Approval

Table 2A

Parameter	Units	Existing Fine Limit	Local Limits Requested for Approval (implementation until landfill disposal is discontinued) UCL Limits Calculated Using No Sludge Criteria	Local Limits Requested for Approval (possible implementation) UCL Limits Calculated Using Non-Exceptional Quality Sludge Criteria	Local Limits Requested for Approval (possible implementation) UCL Limits Calculated Using Exceptional Quality Sludge Criteria
Ammonia-Nitrogen	mg/l	-	- 12.3	- 12.3	- 12.3
Arsenic	mg/l	0.194	0.110 ✓	0.077 0.076	0.037 ✓
Cadmium	mg/l	0.2	0.20 1.0	0.063 ✓	0.028 ✓
Total Chromium	mg/l	15	13.1 ✓	13.1 ✓	13.1 ✓
Hexavalent Chromium	mg/l	6.65	2.3 ✓	2.3 ✓	2.3 ✓
Copper	mg/l	3.4	1.4 ✓	1.4 ✓	0.6 ✓
Total Cyanide	mg/l	0.15	0.15 0.17	0.15 0.17	0.15 0.17
Lead	mg/l	2.31	2.31 13.9	0.50 ✓	0.16 ✓
Mercury	mg/l	0.019	0.019 0.19	0.019 0.043	0.014 ✓
Molybdenum	mg/l	-	-	0.085 ✓	0.085 ✓
Nickel	mg/l	1.68	0.720 ✓	0.454 ✓	0.454 ✓
Phenolics	mg/l	1	1 4.77	1 4.77	1 4.77
Selenium	mg/l	-	14.1 ✓	0.079 ✓	0.079 ✓
Silver	mg/l	1.38	0.56 ✓	0.56 ✓	0.56 ✓
Zinc	mg/l	34.7	3.0 4.2 *	3.0 4.19	1.56 ✓
Total Suspended Solids	mg/l	771	771 767	771 767	771 767
CBOD5	mg/l	729	729 779	729 779	729 779
pH	s.u.	6.0-9.0	6.0-11.5	6.0-11.5	6.0-11.5
Temperature	Deg. F	150 F	150 F	150 F	150 F
Oil and Grease	mg/l	500	500	500	500
Total Petroleum Hydrocarbons	mg/l	-	-	-	-
Phosphorus	mg/l	-	-	-	-

UCL = Uniform Concentration Limit

* calculated limit of 4.2 if MAHL is
adjusted for highest influent concentration (inhibition based)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAR 22 2005

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Ditty:

I have completed review of the Authority's revised permit which was submitted by fax on January 14, 2005, with revisions submitted by fax on January 19, 2005. The revised permit addresses all of the required revisions and most of the recommended revisions in the permit form that resulted from my audit of the Authority's pretreatment program. Note that I believe that two of the recommendations that the Authority did not address, establishing a permit appeal procedure and including the prohibitions from the Rules and Regulations in the permits, can add to the enforceability of the permits. For that reason, I would reiterate my recommendation for these changes, although the revisions are not required. It may be appropriate for the Authority to consider adding a permit appeal procedure to the Rules and Regulations in the future when they are next revised.

If you have any questions regarding this matter, please contact me at 215-814-5790.

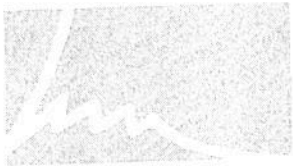
Sincerely,

A handwritten signature in cursive script that reads "John Lovell".

John Lovell
Pretreatment Coordinator

cc: Timothy Dreier, PADEP Southwest Region

Customer Service Hotline: 1-800-438-2474



Hatch Mott MacDonald

Infrastructure and Environment

1600 West Carson Street
Pittsburgh, PA 15219-1031

Telephone: (412) 497-2900
Fax: (412) 497-2901

LETTER OF TRANSMITTAL

TO: U.S. Environmental Protection Agency

Region III (SW3P4)

1650 Arch Street

Philadelphia, PA 19103-2029

Date: March 3, 2005	JOB NO.
ATTN: John Lovell, Pretreatment Coordinator	
Re: Municipal Sanitary Authority of the	
City of New Kensington	
Headworks Analysis for Local Limits	
Response to USEPA Review Letter	

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☐ Attached

☐ Prints

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☐ Plans

☐ Samples

☐ Specifications

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1			MSANK Response to USEPA Review Letter

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☐ FOR BIDS DUE _____, 20____ ☐ PRINTS RETURNED AFTER LOAN TO US

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☐ Approved as noted

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☐ Resubmit ____ copies for approval

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Thank-You,

Linda French



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

NOV 26 2004

Mr. Hugh V. Archer, Ph.D., P.E., DEE
President
Mavickar Environmental Consultants
1240 N. Mountain Road
Harrisburg, PA 17112

Re: Municipal Authority of the City of New Kensington
Local Limits Reevaluation
NPDES No. PA0027111

Dear Mr. Archer:

I have received the *Assessment Report of Local Limits Re-evaluation MSANK Headworks Analysis for Unifirst Corporation* dated September 1, 2004 (Assessment Report). It was not clear to me whether this document was provided for informational purposes or was intended as a request for EPA to consider the comments in its review of the New Kensington local limits reevaluation. In any event, I have reviewed the report in conjunction with the New Kensington local limits submission.

It should be noted that EPA's General Pretreatment Regulations require that POTWs develop local limits to *prevent* interference and pass through. Therefore, not only would a POTW be responsible for ensuring that pass through and interference do not occur, the local limits must be developed to ensure that pass through and interference do not occur even if all of the users discharge pollutant levels equal to the limits. The absence of pass through and interference does not necessarily indicate that the local limits are stringent enough to prevent pass through and interference because in most systems some or all of the industries are discharging at levels that are significantly below the limits.

The Assessment Report notes that New Kensington has proposed to make many of its local limits more stringent based on protection of sludge quality and achieving the EPA exceptional quality standards for sludge disposal. The Assessment Report also notes that with the exception of zinc, the sludge produced by the New Kensington treatment plant consistently meets the exceptional quality standards, and uses this as evidence that the current local limits are stringent enough to protect the sludge quality and ensure that the exceptional quality standards are met. However, as noted above, this is not necessarily true. While EPA will be making several comments on the development of the proposed limits, the review of the submission found no evidence that the limits based on sludge protection are more stringent than necessary to ensure that the metals levels in the sludge allow for land application.

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The Assessment Report also asserts that the Authority cannot justify basing a local limit on water quality standards (WQS) where there is no NPDES effluent limit for that pollutant. However, EPA believes that WQS not only provide justification for establishment of a local limit, but should be used in all cases in order to evaluate local limits. As stated in EPA's July 2004 local limits guidance manual:

Even though the POTW's NPDES permit may not contain a numeric effluent limit for a (pollutant), the permit will probably contain narrative provisions requiring compliance with State WQS and prohibiting the discharge of any toxic pollutants in toxic amounts. A local limit based on a State WQS helps ensure that the POTW can comply with the narrative permit requirement specifying "no discharge of toxics in toxic amounts."

Even in the absence of the narrative permit requirements, EPA believes that it is appropriate for the Authority to develop local limits that ensure its discharge will comply with State water quality standards.

The Assessment Report also suggests that local limits should not be made more stringent based on prevention of inhibition because no inhibition has occurred at the Authority's treatment plant. However, the Authority's annual pretreatment report for calendar year 2003 indicates that there were several instances of treatment plant inhibition related to industrial discharges. Although no specific treatment plant violation was directly attributed to these instances of inhibition, the Authority also could not rule out the possibility that solids violations that occurred in September 2003 were related to these instances of inhibition. In any event, even if no inhibition had occurred, as noted above, the lack of inhibition does not ensure that no inhibition would occur if the users all discharged at the allowable limit. This means that it may be appropriate to tighten limits even if no inhibition has occurred. Again, Although EPA will be commenting on some of the inhibition calculations, the review of the submission found no evidence that the general approach to the calculation of the proposed local limits based on inhibition was inappropriate.

In regard to zinc, the Assessment Report suggests that the Authority should conduct additional sampling before revising the local limit because 80% of the zinc to the treatment plant is from background sources. This is not unexpected considering that approximately 90% of the flow to the treatment plant is from background sources. Based on the review of the data for zinc, the values are fairly consistent over the course of the sampling, and the averages are similar to the findings at other treatment plants. Therefore it does not appear that additional data collection is necessary at this time, and EPA is not requiring that additional data be collected.

For ammonia-nitrogen, the Assessment Report recommends that no local limit be adopted. This appears to be what the Authority has proposed. Although EPA will be making a comment on some of the calculations used to determine the allowable headworks loading for ammonia based on inhibition, it does not appear that we will object to the Authority's proposal not to adopt an ammonia limit.

For phenolics, the Assessment Report again suggests that the Authority should not have a local limit. The Authority's limits review suggests that the phenolics limit could be significantly relaxed. However, the Authority is not proposing to revise the limit. Since the current limit is stringent enough to prevent pass through and interference, EPA has no objection to this. In any event, since the Authority is not proposing to modify the limit for phenolics, there is no program modification for which approval could be denied.

Finally, the Assessment Report recommends that the Authority consider an allocation approach other than the uniform concentration limits that were proposed. Unless the allocation method is obviously punitive, EPA generally leaves the allocation method to the Authority's discretion. The uniform concentration method of allocating the available loading is the most common form of local limits development and is acceptable to EPA.

Although EPA will be providing some comments on the Authority's local limits reevaluation, we will not be requiring that they make the changes suggested in the Assessment report for the reasons noted above. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,

A handwritten signature in dark ink, appearing to read "John Lovell", written in a cursive style.

John Lovell
Pretreatment Coordinator

cc: Joseph Ditty, MSANK
Timothy Dreier, PADEP Southwest Region



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

NOV 26 2004

Mr. Joseph F. Ditty, Pretreatment Coordinator
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Ditty:

I have completed review of the Authority's local limits reevaluation submitted on July 30, 2004 by your consultant Hatch, Mott, MacDonald. Based on this review, I have several comments as described below. For your use, I have enclosed a printout of a spreadsheet that I used to verify the Authority's local limit calculations. Where any of my comments suggested a revision to the data used to calculate the local limits, I revised the data inputs in the spreadsheet to reflect the comment. The final limits shown on Table 13 of the spreadsheet therefore represent the limits that would result if the Authority made all of the recommended changes. Please note that these calculations are not necessarily provided to suggest that the Authority use these limits directly, but simply to illustrate the changes in the limits based on the comments.

✓ The Authority's reevaluation recommends a slight relaxation of the local limits for CBOD and TSS based on the calculated allowable headworks loading. However, EPA's guidance recommends that the local limit be based on an allowable headworks loading no greater than the design loading of the treatment plant. While the proposed local limits for these pollutants are based on allowable headworks loadings that are less than the those calculated in the previous submission, they are greater than the design loading of the treatment plant. Therefore, it appears that the relaxation of the limits is not appropriate. While it appears that local limits based on the design loading would become more stringent, maintaining the existing limits would be acceptable.

In general, when calculating allowable headworks loadings based on inhibition, we recommend that the most stringent inhibition criteria for each pollutant be used. Use of the most stringent criteria provides the greatest protection against inhibition. If the treatment plant has been shown to be capable of accepting a higher loading based on actual influent data, then the allowable headworks loading can be increased to the higher value based on the influent data.

Based on this approach, I revised the activated sludge inhibition criteria in Table 7 of the spreadsheet for lead and zinc, and added inhibition criteria for ammonia and phenol. Note that

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the inhibition criteria that I used were generally taken from the new local limits guidance, and that the criteria for lead has been revised in the new guidance to correct a typographical error contained in the old guidance. I also revised the silver criteria in Table 9 (anaerobic digester inhibition for conservative pollutants).

For non-conservative pollutants such as cyanide, ammonia, and hexavalent chromium, EPA guidance recommends a different approach to the calculation of the allowable headworks loadings based on anaerobic digester inhibition. The equation used for digester inhibition from metals is based on the assumption that any pollutant that is removed from the wastewater goes to the digester, which is not true for any non-conservative pollutant, and so a different formula is used to calculate the allowable headworks loadings for non-conservative pollutants. The calculations for non-conservative pollutants is shown in Table 10 of the spreadsheet. Note that in order to calculate the allowable headworks loading based on digester inhibition for non-conservative pollutants, the concentration of the pollutant to the digester is needed. Since this data was only available in the submission for cyanide, I could not do the calculations for ammonia or hexavalent chromium. If this data is available, the Authority should add it to the evaluation. I also revised the inhibition criteria for cyanide in Table 10 based on the most stringent value found in the new guidance.

As a rough check on whether digester influent data was critical to the reevaluation, I included the inhibition criteria for ammonia and hexavalent chromium in Table 9 and performed the calculations as if these were conservative pollutants. Since this assumes that a greater percentage of the pollutant goes to the digester, it would result in a lower allowable headworks loading based on digester inhibition. As shown in Table 13, the allowable headworks loading based on digester inhibition for ammonia could be the most stringent allowable loading. However, the calculated local limit would still be over 123 mg/l (based on the highest influent value) suggesting that no limit is necessary even using this very conservative approach. For hexavalent chromium, inhibition is not the most stringent loading. Since it appears that the correct approach to calculating the allowable headworks loadings based on digester inhibition for these two pollutants would not alter the final result, I will not require that the Authority conduct sampling for these two pollutants if the data does not currently exist.

Table 11 of the spreadsheet compares the calculated allowable headworks loading based on inhibition to the allowable loading based on the highest observed influent concentration converted to a loading based on the average plant flow used in the reevaluation. If this "maximum" influent loading is greater than the allowable loading based on inhibition, then the allowable loading is increased to the maximum observed loading. For the maximum influent concentrations, I used the Authority's data in the submission as well as data that has been submitted in the Authority's annual reports for the last several years. Note that this only made a difference in the allowable loadings for zinc and ammonia. Of course if the Authority is not confident that the observed levels of the pollutants did not cause inhibition in the treatment plant, this step should not be used.

The Authority proposed a phased approach to implementing its local limits. Since this is the first time that the Authority has used land application of sludge as a basis for its local limits,

the submission proposes that the limits for the first two years be set at a level that does not consider land application, the limits for the third year be set at a level that would allow for meeting the ceiling concentration standards, and the limits for the fourth year on be set at a level that would allow for meeting the exceptional quality standards for land application. This approach is acceptable. However, for several pollutants (e.g., cadmium and mercury) the initial limit would be less stringent than the existing limit while the final limit would be more stringent than the existing limit. In these cases, it is recommended that the initial limit be set at the existing limit. Since users have already been required to comply with the existing limit for several years, there does not appear to be reason to relax the limit for a short period of time when it will be made more stringent in the future.

The reevaluation proposes to maintain the current local limit for oil and grease. While this is probably acceptable, I would like some additional information on any problems that have been encountered in the collection system that could be related to oil and grease. For example, is all or part of the collection system made up of combined sewers? Have any sewer blockages resulted in overflows, whether from a combined sewer or not? If there have been blockages, have any of these been related to grease build-up?

The reevaluation proposes to relax the upper pH limit and incorporate an exceedance policy for continuous pH monitoring which is similar to 40 CFR 401.17. This approach is acceptable. However, the description of the approach in the submission indicates that the Authority would be allowed adjust the individual exceedance time frame as it deems appropriate. As written, this is too broad to be approved. If it were limited to authorizing the Authority to shorten the time period, that would be acceptable. If the Authority wants to obtain approval for increasing the time period, specific procedures that identify the exact increase that would be provided must be included. Based on the procedures, a person independent of the Authority would need to be able to calculate the revised time frame and come to the same conclusion as the Authority.

The Authority used the State permitting model to calculate theoretical NPDES limits for its water quality calculations to determine the local limits. This is the preferred approach to the water quality calculations. However, the Authority did not determine an NPDES limit for cyanide. Presumably, this is because the state water quality standard is for free cyanide, while the Authority was calculating a local limit for total cyanide. In general, we recommend that the water quality standard for free cyanide be used in the calculations for total cyanide, and the Authority should add this evaluation to the final report. Note that tables 3, 4, and 5 use the water quality standard for free cyanide and it appears that it is not the most stringent criteria (see Table 13). However, to provide a check, the Authority should rerun the state model using the free cyanide standard.

The Authority did calculate a theoretical NPDES limit for arsenic. However, EPA recently revised the drinking water standard for arsenic from 0.05 mg/l to 0.01 mg/l. Since the state human health standard is based on protection of drinking water intakes, the Authority should recalculate its theoretical NPDES limit for arsenic using 0.01 mg/l as the human health standard. Note that I included this revised standard in Table 5 and the allowable headworks

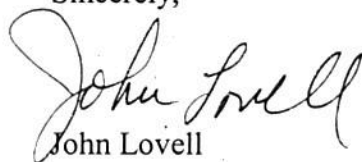
loading based on water quality was still less stringent than the allowable headworks loading based on sludge protection. Again, however, the Authority should rerun the state model to verify this.

As noted above, the Authority used the state permitting model to develop theoretical NPDES limits for use in the local limits calculations. Please note that when this approach is used, there is no need to also calculate allowable headworks loadings based on the water quality standards, and therefore the water quality standards would not need to be entered in PRELIM for any pollutant with a theoretical NPDES limit. Since the allowable headworks loadings based on the water quality standards were higher than the allowable headworks loadings based on the theoretical permit limits, the Authority's use of the standards did not impact the final limits and therefore no change to this submission is necessary, but the Authority should keep this in mind for future submissions.

A consultant for Unifirst submitted comments on the Authority's submission. You should be receiving a copy of my response to those comments. In general, I did not find any of the comments to be persuasive in requiring changes to the submission. However, the consultant did raise the issue of the method used to allocate the local limits. Note that the allocation method is generally at the discretion of the Authority, and the Authority's allocation method used in its submission is acceptable. However, it is unclear from the submission whether the Authority evaluated the impact of the new limits on the users. While the impact on the users is not necessarily the main concern in developing the limits, different allocation methods may save time and effort in the long run even though additional effort is needed in the short term. If not already done, I would recommend that the Authority use its existing data for the industrial users to evaluate the potential future compliance status of the users. If slight adjustments to the allocation allow for more consistent compliance, there may be advantages to altering the allocation.

Please provide a response to the issues raised above. If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,

A handwritten signature in black ink, appearing to read "John Lovell". The signature is fluid and cursive, with the first name "John" being more prominent than the last name "Lovell".

John Lovell
Pretreatment Coordinator

Enclosure

cc: Timothy Dreier, PADEP Southwest Region (w/o enclosure)

POTW: New Kensington

DATE: 11/19/04

Local Limits Review Checklist

	Y	N	N/A	Comment
1. Reevaluation conducted in accordance with sampling plan?				
<ul style="list-style-type: none"> • All pollutants included? • Data collection 	X			
- Correct number of samples collected?	X			
- Correct sample locations?	X			
- Correct detection levels?	X			
2. POTW calculations correct?	X			
3. POTW data inputs correct?		X		Some revisions to inhibition criteria recommended
4. Included hauled waste, if appropriate?			X	
5. If included, conventional limits evaluated based on treatment plant design?		X		Proposed local limits based on MAHL calculations and are less stringent than existing LL.
6. Limits make sense based on influent/effluent/sludge monitoring evaluation?	X			

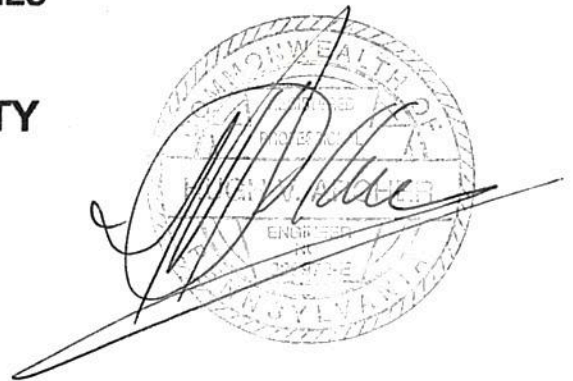
**ASSESSMENT REPORT
OF
LOCAL LIMITS RE-EVALUATION
MSANK HEADWORKS ANALYSIS
FOR**

UNIFIRST CORPORATION

NEW KENSINGTON FACILITIES

ALLEGHENY COUNTY

PREPARED BY:



MAVICKAR Environmental Consultants

Environmental Engineers & Planners

1240 North Mountain Road
Harrisburg, PA 17112

SEPTEMBER 1, 2004

INTRODUCTION

Headworks Analysis for Determining Local Limits

Headworks analysis for influent pollutant loadings to a Publicly Owned Treatment Works (POTW) provides the basis for regulating industrial/commercial pollutant loads for ensuring that: (1) National Pollutant Discharge Elimination System (NPDES) permit effluent limitations are consistently being met; (2) industrial/commercial loadings do not adversely impact/inhibit the biological treatment processes; (3) industrial/commercial pollutant loadings do not inhibit the POTW's retention, use and disposal of sewage sludge; and (4) industrial/commercial pollutant loadings do not pose a risk to the health and safety of POTW workers. This analysis is required by the Pretreatment program implemented by the United States Environmental Protection Agency ("EPA") found at 40 CFR Part 403.

In July of 2004, the Municipal Sanitary Authority of the City of New Kensington (MSANK), in order to satisfy the provisions of 40 CFR Part 403, submitted a 'Headworks Analysis for Local Limits Re-evaluation' ("The Headworks Analysis Report or HAR") to the federal Environmental Protection Agency (EPA) for review and appropriate action. This HAR includes revised local limits for Hexavalent Chromium, Total Cyanide, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Silver and Zinc and new local limits for Molybdenum, Selenium, Phenolics, and Ammonia-Nitrogen.¹ These

¹ There is some confusion as to whether MSANK is revising its local limits for Ammonia-Nitrogen and Phenolics. See discussion , infra.



revised local limits are generally across the board more restrictive than the existing limits and in several cases result in more than a 50% reduction in the limits.

The HAR reportedly uses the PRELIM modeling approach to determine the Maximum Allowable Headworks Loading (MAHL) for pollutants of concern (POC), which MSANK determined, based on a sampling program utilizing ten 24-hour composite samples, conducted in March and April 2004. The ten composite samples also purportedly included background sampling – locations on the MSANK system in the City of New Kensington and Lower Burrell containing only domestic wastewater sources, five sludge samples and was supported by additional effluent and sludge samples collected since the completion of the Anaerobic Digester(s) upgrade in October of 2003.

For the heavy metal parameters, Arsenic, Cadmium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium and Zinc, the HAR alleges that the EPA “clean sludge” criteria was given as the basis for determining the revised local limits, in keeping with EPA’s recommendation to POTWs to consider using land application “clean sludge” values in their calculation of allowable headworks loadings.

For Chromium, inhibition of the activated sludge biological process, and for Cyanide and Silver, potential inhibition of the anaerobic digestion process, is reported as the basis for the revised limits. For Hexavalent Chromium, Ammonia-Nitrogen and Phenolics, the HAR local limits evaluation is purportedly based on water quality standards for the protection of fish and aquatic life and public water supply.

This Assessment Report reviews the actual sampling results collected and reported by MSANK in the HAR, which results are purportedly the basis for the significant reduction in the existing local limits, and uses these reported results in

developing comments/recommendations. No independent PRELIM modeling has been conducted on the collected data.

“CLEAN SLUDGE” Criteria

Biological solids (sludge) produced from the MSANK wastewater treatment facilities is thickened, sent to anaerobic digestion for stabilization and dried on belt filter presses prior to final disposal in a landfill. Both EPA and the Pennsylvania Department of Environmental Protection (DEP) identify two classes of biosolids (processed sludge): Exceptional Quality – Class A and Non-exceptional Quality – Class B. Class A, which is suitable for direct beneficial reuse, has no site restrictions for land application and may be given away or sold for application to lawns and gardens. Class A biosolids, in addition to meeting the pollutant concentrations identified in Table 1 [See 40 CFR § 503.13 and 25 Pa. Code §271.914 (a) (3) and (4)] also has very stringent pathogen reduction and vector attraction reduction requirements and must be non-liquid and non-recognizable as biosolids. (See 40 CFR §§ 503.30-503.33 and 25 Pa. Code §§ 271.931-933) Non-exceptional Quality biosolids - Class B Biosolids - has restrictive land application requirements [See 25 Pa. Code §271.914 (a) (1)], must meet the pollutant concentrations in Table 1 and also has certain pathogen reduction and vector attraction reduction requirements that must be met. (See also 40 CFR §§ 503.30-503.33 and 25 Pa. Code §§ 271.931-933)

	Exceptional Quality Class A	Non-Exception Quality Class B
Pollutant	*must be continuously met *based on a monthly average	*based on a ceiling concentration
Arsenic	41	75
Cadmium	39	85
Copper	1500	4300
Lead	300	840
Mercury	17	57
Molybdenum		75
Nickel	420	420
Selenium	100	100
Zinc	2800	7500

TABLE 1. POLLUTANT LIMITS

Table 2 lists the MSANK sludge analysis data, as documented by MSANK in the HAR for the three-year period 2000 through 2003, and the sludge sampling performed in 2004 as part of the Headworks analysis. Reviewing the historical data for the nine heavy metals identified by MSANK that allegedly needs to be reduced to achieve "clean sludge" standards demonstrates that MSANK'S biosolids now consistently meet the Exceptional Quality (Class A Standards) for all the heavy metals.

Table 3 further demonstrates that MSANK's biosolids, utilizing the maximum values reported for each heavy metal over the three-year period (with the sole exception of Zinc), are more than 60% lower than the EPA Exceptional Quality criteria (Class A Criteria) with the current existing local limits in place. This clearly demonstrates that even with a conservative reserve of 20 to 25%, the current local limits for the nine identified heavy metals produce Exceptional Quality Biosolids from the MSANK treatment facilities.² For MSANK to fully comply with the Exceptional Quality Biosolids, however, the existing biosolids would need additional treatment for achieving: (a) pathogen reduction and vector attraction reduction requirements (see 25 Pa. Code §§ 271.931-933) and (b) producing an end-product that is non-liquid and non-recognizable as biosolids.

² In Table 9 of the HAR, "comments" MSANK reports that for several of the metals in question, namely Arsenic, Mercury and Selenium, the 10 day sampling data is non-detect. This forms a separate basis to not alter the Local Limits for those parameters.

PARAMETER	Units	2000				2001				2002				2003				2004		EPA - Criteria		
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	AVE	MAX	AVE	MAX	
Hexavalent Chromium	mg/kg	<4.33	<4.52	<5.24	<6.0	<2.85	<4.95	<5.35	<3.0	<5.68	2.3	<2.3	<2.2	<2.1	<2.4	0.5	0.5					
Phenolics	mg/kg	21.4	7.9	17.9	48.2	0.006	0.02	5.95	14.3	10.9	2.4	3.7	1.2	0.87	--	5.95	14.3					
% Solids	mg/kg	--	--	--	--	--	--	--	--	--	--	17.5	18.3	19	16.8	19	19.9					
Total Cyanide	mg/kg	1.12	3.63	2.04	1.51	4.02	1.3	2.52	1.11	3.13	<2.7	<2.9	2.7	5.3	<3.0	14.1	15.5					
Arsenic	mg/kg	<4.3	<9.0	<5.3	<12.0	<5.7	<9.06	<10.7	<6.9	<11.4	7.1	<5.7	7.5	8.1	8.1	4.34	6.62	41	75			
Cadmium	mg/kg	7.2	9	7.1	11.1	9.23	11.3	9.4	6.64	14.2	10.3	10.5	15.8	15.3	14.9	14.1	14.5	39	85			
Chromium	mg/kg	212	224	260	318	84.6	106	109	48.4	40.4	45.3	40.8	77.5	90.6	110	199	219					
Copper	mg/kg	378	534	438	645	360	481	540	324	330	423	323	740	818	788	858	907	1,500	4,300			
Lead	mg/kg	132	160	146	132	173	129	173	120	115	101	128	235	237	239	203	215	300	840			
Mercury	mg/kg	0.43	0.43	1.79	1.27	2.57	1.01	0.84	0.32	1.42	0.77	1.2	2.8	5.1	2	1.6	2.48	17	57			
Nickle	mg/kg	94.4	136	108	275	86.6	95	124	68.2	58.5	71.4	63.1	122	139	135	193	208	420	420			
Molybdenum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.3	16.5	--	75			
Selenium	mg/kg	<4.3	17.9	13.7	14.6	<5.7	11.6	11.2	8.17	<11.4	7.1	6.0	11	9.5	--	5.29	7.94	100	100			
Silver	mg/kg	25.4	14.8	16.7	39.7	14.0	19.7	21.0	14.1	12.2	12.3	13.2	33.6	24.5	24.4	39.4	42.4					
Zinc	mg/kg	1,260	1,620	1,330	1,990	1,020	1,416	1,510	882	1,030	1,020	1,170	2,210	2,530	2,600	2,780	2,870	2,800	7,500			

Table 2 : MSANK - Sludge Sampling & Clean Sludge Criteria

PARAMETER	Units	2000				2001				2002				2003				2004		EPA - Criteria	
		Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Ave	MAX	Ave	MAX
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic	mg/kg	<4.3	<9.0	<5.3	<12.0	<5.7	<9.06	<10.7	<6.9	<11.4	7.1	<6.7	8.1	<6.7	7.5	8.1	8.1	4.34	6.62	41	75
Cadmium	mg/kg	7.2	9	7.1	11.1	9.23	11.3	9.4	6.64	14.2	10.3	10.5	14.9	10.5	15.8	15.3	14.9	14.1	14.5	39	85
Copper	mg/kg	378	534	438	645	360	481	640	324	330	423	323	788	323	740	818	788	858	907	1,500	4,300
Lead	mg/kg	132	160	146	132	173	129	173	120	115	101	128	239	128	235	237	239	203	215	300	840
Mercury	mg/kg	0.43	0.43	1.79	1.27	2.57	1.01	0.64	0.32	1.42	0.77	1.2	2	1.2	2.8	5.1	2	1.6	2.48	17	57
Nickel	mg/kg	94.4	136	108	275	86.6	95	124	68.2	56.5	71.4	63.1	135	63.1	122	139	135	193	208	420	420
Molybdenum	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.3	16.5	**	75
Selenium	mg/kg	<4.3	17.9	13.7	14.6	<5.7	11.6	11.2	8.17	<11.4	7.1	6.0	--	6.0	11	9.5	--	5.29	7.94	100	100
Zinc	mg/kg	1,260	1,620	1,330	1,990	1,020	1,416	1,510	882	1,030	1,020	1,170	2,600	1,170	2,210	2,530	2,600	2,780	2,870	2,800	7,500

Table 3: MSANK - Biosolids Comparison with Clean Sludge Criteria

Note : ** EPA dropped the Molybdenum requirement for Exceptional Quality Biosolids

MSANK, in Section 8.0 of the HAR, "Conclusions" clearly recognizes, in the second paragraph that, "Review of historical sludge data collected as part of MSANK's quarterly local limit monitoring during Years 2000 through 2003 indicates the sludge has consistently been within the clean sludge criteria under the existing local limits. A summary of this data is provided in Table 9. However, sludge data collected as part of the Headwords Analysis indicates that the Zinc concentration of the sludge exceeded the Table 3 clean sludge criteria for this parameter."

The clean sludge criteria for Zinc is 2800 mg/Kg reported as a monthly average not to be exceeded. The average of the five sludge samples collected in 2004, as part of the Headwork analysis, was 2780, which is less than the 2800, but close enough to raise some concerns. The average sludge Zinc concentration from year 2000 went from a low value of 882 mg/Kg in December 2001 to a high of 2600 in December of 2003, the value increasing each quarter from 12/2001 to 12/2003. Influent and background sampling data for Zinc shows that 80% of the Zinc reaching the wastewater treatment facilities originates from non-industrial/non-commercial waste streams. Therefore, MSANK needs to undertake significantly more sampling investigations before a local limit is established for Zinc that may not achieve MSANK's clean sludge objectives because of such significant background concentrations. For the remaining eight heavy metals there is no technical basis to reduce local limits as the existing limits are supporting"Clean Sludge."³

³ As stated previously, even if MSANK achieved the Clean Sludge criteria for all nine metals, it would still need to satisfy for pathogen reduction and vector reduction requirements and develop an end-product that is non-liquid and non-recognizable as solids.

WATER QUALITY STANDARDS & PROCESS INHIBITION

MSANK, in the HAR, apparently recommends new local limits for Ammonia-Nitrogen and Phenolics, reportedly based on water quality standards as shown in Table 9 of the HAR though the text on page 6.8 of the HAR states that "Based upon the modeling data for [Ammonia-Nitrogen] MSANK desires to not adopt a local limit for Ammonia." Further, additional confusion exists however, as Table 10 of the HAR reportedly is not requesting a local limit for Ammonia-Nitrogen and is recommending it maintain the existing local limit of 1 mg/l for Phenolics. If Table 10 of the HAR is correct then, based on the rather significant value reported in Table 9 as the proposed local limit for Phenolics, the existing limit of 1 mg/l should be dropped as not necessary.

This conclusion is supported by MSANK's NPDES Permit, issued by DEP. NPDES effluent limitations established by DEP are required to be the more restrictive of technology-based or water quality-based limitations. For Ammonia Nitrogen and Phenolics parameters, DEP evaluated the potential water quality impacts on in-stream and down-stream uses and determined that the MSANK's treated discharge to the Allegheny River does not need any effluent limitations for either parameter. Table 4 of this report identifies the influent, effluent and background Headworks sampling analysis and lists the current NPDES effluent limitations necessary to protect water quality.

PARAMETER	DETECTION LIMIT	INFLUENT		EFFLUENT		BACK		NPDES LIMITS	Exist.	Limits		Prop.	Percent Change
		AVE	MAX	AVE	MAX	AVE	MAX			Fine	Fine		
Flow (MGD)		8.15	14.86	8.15 ?	14.86 ?	8.15 ?	14.86 ?	Record					
Ammonia-Nitrogen	0.1	9.35	16.5	5.94	11.8	10.82	15.3	No Limit					
CBOD ₅	1	61.6	105	9.5	13	110.6	156	25/50		729	779		
Hexavalent Chromium	0.01	0.005	0.005	0.005	0.005	0.005	0.005	No Limit		6.65	2.3		65.41 %
Oil & Grease	1	24.6	39	5		25.5	46	No Limit		500	500		
pH		6.9	7.4					6 to 9					
Temperature		10.2	11					No Limit					
TPH	1	3.8	7.9	0.51	0.55	0.74	1.6	No Limit					
Phenolics	0.001	0.0054	0.019	0.0012	0.004	0.0055	0.02	No Limit			1		NEW
Phosphorus	0.01	2.4	3.7	1.1	1.8	3.3	8.3	No Limit					
TSS	1	89.6	162	11.2	19	55.7	82	30/60		771	767		
Total Cyanide	0.005	0.005	0.009	0.011	0.021	0.0051	0.015	No Limit		0.15	0.82		
Arsenic	0.002	0.001	0.001	0.001	0.001	0.001	0.002	No Limit		0.194	0.04		80.93%
Cadmium	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	No Limit		0.2	0.03		86.00%
Chromium	0.003	0.0074	0.03	0.002	0.003	0.002	0.0015	No Limit		15	13.1		12.67%
Copper	0.005	0.036	0.07	0.01	0.02	0.0478	0.09	No Limit		3.4	0.6		82.35%
Lead	0.0005	0.0062	0.016	0.0011	0.002	0.0026	0.009	No Limit		2.31	0.16		93.07%
Mercury	0.0002	1E-04	1E-04	1E-04	1E-04	1E-04	1E-04	No Limit		0.019	0.01		26.32%
Nickle	0.003	0.013	0.03	0.007	0.01	0.0037	0.007	No Limit		1.68	0.45		72.98%
Molybdenum	0.002	0.0022	0.004	0.001	0.002	0.001	0.001	No Limit			0.09		NEW
Selenium	0.005	0.003	0.0025	0.003	0.003	0.003	0.0025	No Limit			0.08		NEW
Silver	0.0005	0.003	0.0056	0.007	0.0019	3E-04	0.0003	No Limit		1.38	0.66		52.17%
Zinc	0.01	0.15	0.21	0.07	0.08	0.12	0.19	No Limit		34.7	1.56		95.50%

Table 4 : MSANK - 2004 Headworks Sampling Analysis

Note : Numbers shown in ***bold italics*** were not detected in the sampling. (ie below the accepted detection limit)

? Flows were given for effluent and background which was the same as the influent values

MSANK, in the HAR, has also recommended a 65% reduction in the existing local limit for Hexavalent Chromium based on the Acute Water Quality Criteria. DEP, who is responsible for evaluating and developing NPDES effluent limitations to protect fish and aquatic life ensuring maintenance of water quality standards, has evaluated the MSANK point source discharge and determined that no effluent limitation is needed for Hexavalent Chromium to prevent a violation of the Acute Water Quality Criteria. The HAR monitoring results shows that Hexavalent Chromium was not detected in any of the samples taken of the treatment plant influent, effluent and background sampling.

The EPA Guidance Manual, "Local Limits Development Guidance, Office of Wastewater Management, EPA 833-R-04-002A, July 2004," was reportedly used by MSANK in developing the HAR. The Guidance states that for No Past Inhibition Problems at POTW, "POTWs may not need to calculate Allowable Headworks Loadings (AHLs) to protect against inhibition because current loadings are acceptable to the treatment work's biological processes. However, a POTW may still choose to calculate AHLs based on biological process inhibition criteria to prevent future loadings that may cause inhibition and should follow the steps outlined below for POTWs with past inhibition problems." (See pp 5-19 and 5-20 of the Guidance Manual)

The Guidance Manual gives the POTW the ability to choose to calculate AHLs, but notes that, "Site-specific inhibition data are preferred to literature data because they more accurately measure pollutant concentrations that cause inhibition in actual biological treatment environments. Inhibition of biological treatment processes could be a function of toxic compounds (not a single toxic compound), synergism, antagonism, pH, temperature, hardness, stressed conditions, microorganism acclimation, and the

number and variety of microorganisms present. Sometimes based on laboratory studies using pure cultures, literature values can indicate inhibition at much lower concentrations than in actual biological treatment environments.” The Guidance Manual reports literature inhibition values for Total Chromium and Total Cyanide of 1 to 100 mg/l and 13 to 65 mg/l for Dissolved Silver. The HAR has not documented any past inhibitions of either the activated sludge and/or the anaerobic digestion processes, but, nonetheless MSANK elected to calculate AHLs for Total Cyanide, Total Chromium and Silver based on the most restrictive literature values reported by EPA.

The MSANK’s HAR provides no technically defensible basis for the proposed 65% reduction in Hexavalent Chromium when this parameter was reportedly not detected in neither the influent nor the effluent samples of the treatment plant. Without an NPDES effluent limitation for the three parameters, Ammonia-Nitrogen, Hexavalent Chromium and Phenolics, MSANK cannot support justifying local limitations.

For Chromium, Cyanide and Silver, pollutants that MSANK alleges need local limits to prevent inhibition of biological processes, the HAR has not documented any inhibition problems with either the activated sludge process nor the sludge digesters, which would strongly indicate that if a plant specific inhibition study was to be done, the existing local limits for Chromium and Silver would be appropriate.

Finally, MSANK has calculated the local limits using a “uniform concentration limit approach”, which translates into the same pollutant limitation for all of MSANK’s industrial and commercial users. While this approach reduces the pretreatment administrative burden for MSANK, this approach is inherently unfair for the industrial/commercial users of the treatment system. Some users will be able to

discharge some category of wastewater without any treatment while some users will have to install tertiary treatment processes for their wastewater at considerable capital and operating & maintenance expense. MSANK should allocate local limits to assure an equal burden on all users of the system.

IN SUMMARY

Based upon the analysis of the HAR, Mavickar Consultants offers the following:

1. The data that MSANK relies upon in the HAR fails to justify any change in the local limits for 8 of 9 metals, with the sole exception being zinc. However, since it appears that 80% of the zinc reaching the wastewater facilities originates from non-industrial, non-commercial wastestreams, more investigation is necessary before imposing a more stringent local limit on zinc.
2. That existing 10 day sampling data for Selenium, Arsenic and Mercury does not support imposing any more stringent local limits on those parameters.
3. The existing data does not support altering the local limits for Chromium, silver or cyanide as MSANK has failed to document that there is an inhibition problem in either the activated sludge process or the sludge digesters.
4. Water quality concerns do not provide any basis for imposing a local limit for either Ammonia-Nitrogen or Phenolics and, therefore, neither parameter should be limited.
5. MSANK should re-evaluate its use of the uniform concentration limit approach to imposing local limits but rather should allocate local limits to assure an equal burden on all users of the system.



**Hatch Mott
MacDonald**

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July 30, 2004

Mr. John Lovell
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

**MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON
HEADWORKS ANALYSIS FOR LOCAL LIMITS REEVALUATION**

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), please find enclosed one (1) copy of the Headworks Analysis for Local Limits Reevaluation Report. This report is being submitted in compliance with the approved headworks analysis sampling plan schedule extension, which requires submission of the report to the U.S. Environmental Protection Agency in July 2004.

As discussed with you during our telephone conversation on July 28, 2004, MSANK is providing a 30-day comment period for interested parties to review the report. The 30-day comment period will begin on August 2, 2004 and end on September 1, 2004.

Thank you for your review and consideration of this submission. If you have any questions regarding the report, please contact me.

Sincerely,

Linda French

Linda French
Project Scientist

Enclosure

Cc w/ encl:	Daniel H. Rowe, Jr. – MSANK	Joseph Ditty – MSANK
	John Mihok – MSANK	Susan Barbiaux - MSANK
	James Brucker – MSANK	Alan Critchlow - MSANK
	Delbert Brown – MSANK	Aaron Kress - Solicitor
	David Ponchione - PaDEP	Stephen Polen, P.E. - HMM
	Howard Wein – Klett Rooney Lieber & Schorling	



John Lovell

05/27/2004 09:20 AM

To: Joe Ditty <jditty@msank.org>

cc:

Subject: Re: FW: MSA of the City of New Kensington

Thanks for forwarding the message.
Joe Ditty <jditty@msank.org>



Joe Ditty

<jditty@msank.org>

05/26/2004 02:48 PM

To: John Lovell/R3/USEPA/US@EPA

cc:

Subject: FW: MSA of the City of New Kensington

John:

I am forwarding this response from DEP concerning the extension request for the local limits headwork's evaluation report.

Joe Ditty
Pretreatment Coordinator
Municipal Sanitary Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068
(724) 335-9813 (Office)
(724) 335-8289 (Fax)

-----Original Message-----

From: French, Linda [mailto:Linda.French@hatchmott.com]
Sent: Wednesday, May 26, 2004 9:42 AM
To: jditty@msank.org
Cc: drowe@msank.org
Subject: FW: MSA of the City of New Kensington

FYI.

-----Original Message-----

From: Ponchione, David [mailto:dponchione@state.pa.us]
Sent: Wednesday, May 26, 2004 9:01 AM
To: French, Linda
Subject: MSA of the City of New Kensington

Linda, we received your May 20, 2004 letter. By way of the email, DEP approves your request to submit the Headwork's Analysis for Local Limits Reevaluation report to the USEPA in July 2004 rather than in June 2004. Thank-you for first contacting USEPA to confirm they have no problem with the extension. Should you have any questions, please reply.

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Attention:

This e-mail and any files transmitted with it from Hatch Mott MacDonald are confidential and intended solely for use of the individual or entity to whom they are addressed. If you have received this e-mail in error please immediately notify the sender.

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Joe Ditty (jditty@msank.org).\



**Hatch Mott
MacDonald**

Infrastructure and Environment
Gateway View Plaza, 1600 W. Carson St.
Pittsburgh, PA 15219
T 412.497.2900 www.hatchmott.com

May 20, 2004

Mr. Timothy Dreier
Regional Manager
Water Management
PA Department of Environmental Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745

**RE: Municipal Sanitary Authority of the City of New Kensington
NPDES Permit PA0027111
Headworks Analysis for Local Limits Reevaluation**

Dear Mr. Dreier:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this letter pertains to the Headworks Analysis for Local Limits Reevaluation currently being conducted by MSANK. As you are aware, the U.S. Environmental Protection Agency (USEPA) issued approval of the Headworks Analysis Sampling Plan on February 10, 2004. The schedule in the sampling plan was as follows:

Sample Collection	March 2004
Evaluation of Sample Collection Data	April 2004
Headwork Analysis / Local Limits Reevaluation	May 2004
Submission of Local Limits Reevaluation to USEPA	June 2004

In accordance with this schedule, MSANK initiated the sample collection portion of the study in March. Sample data was received from the laboratory and evaluated in April. The Headworks Analysis / Local Limits Reevaluation portion of the study is currently in progress. However, since the time that the sampling plan was approved by the USEPA, one of the industrial users regulated under the MSANK industrial pretreatment program requested that the MSANK Board provide an opportunity for interested parties to review the Headworks Analysis for Local Limits Reevaluation report, prior to MSANK's submission of the report to the USEPA. The MSANK Board approved the industrial user's request at their regular monthly meeting on May 17, 2004.

It is understood that the MSANK Pretreatment Coordinator contacted the USEPA on May 18, 2004 to discuss this situation. It was understood from his conversation that extension of the schedule would not be problematic to the USEPA.

Based on these events, on behalf of the MSANK Board, this letter is intended to request an extension of the referenced schedule to enable submission of the Headworks Analysis for Local Limits Reevaluation report to the USEPA in July 2004, rather than in June 2004.



Hatch Mott
MacDonald

Thank you for your consideration of this request. If you have any questions regarding this matter, please contact me.

Very truly yours,

Hatch Mott MacDonald

Linda French

Linda French
Project Scientist
T412.497.2912 F412.497.2901
Linda.French@hatchmott.com

Attachment

Cc: Daniel H. Rowe - MSANK
Joseph Ditty - MSANK
Stephen B. Polen, P.E. - HMM
John Lovell - USEPA

Mr. Timothy Dreier Page 2 5/20/04



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

FEB 10 2004

Mr. Daniel H. Rowe, Jr., Manager
The Municipal Authority of the City of New Kensington
120 Logans Ferry Road
New Kensington, PA 15068-2046

Re: Pretreatment Program
NPDES No. PA0027111

Dear Mr. Rowe:

Thank you for your letter of February 2, 2004 which responded to my comments on the Authority's local limits sampling plan. The proposed revisions to the sampling plan are acceptable, and the Authority should proceed as quickly as possible in collecting the data for the reevaluation of the limits.

If you have any questions regarding this matter, please contact me at 215-814-5790.

Sincerely,

A handwritten signature in cursive script that reads "John Lovell".

John Lovell
Pretreatment Coordinator

cc: Timothy Dreier, PADEP Southwest Office

THE MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON

120 Logans Ferry Road, New Kensington, PA 15068 Phone (724) 335-9813 - Fax (724) 335-8289

John F. Mihok, Chairman
Susan E. Barbiaux, Vice-Chairperson
James C. Brucker, Secretary
David A. Wohleber, Treasurer
Delbert J. Brown, Asst. Secretary-Treasurer

Daniel H. Rowe, Jr., Manager

February 2, 2004

Mr. John Lovell
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

MUNICIPAL SANITARY AUTHORITY OF THE CITY OF NEW KENSINGTON NPDES PERMIT NO. PA0027111 HEADWORKS ANALYSIS SAMPLING PLAN-REVISED FEBRUARY 2004

Dear Mr. Lovell:

On behalf of the Municipal Sanitary Authority of the City of New Kensington (MSANK), this submission responds to your letter dated December 16, 2003 regarding the Headworks Analysis Sampling Plan that was submitted for approval on October 27, 2003. Responses to your comments on the original Headworks Analysis Sampling Plan are provided below. A revised Headworks Analysis Sampling Plan that incorporates these responses is enclosed for your review.

1. Sample Points

As clarification, the raw influent samples will be collected prior to the influent combining with any recycle or other internal waste streams. No revision to the Headworks Analysis sampling plan was required.

2. Background Monitoring

MSANK applies the local limitations developed as part of the Industrial Pretreatment Program to commercial, as well as industrial facilities within the service area. The Municipal Water Authority of the City of New Kensington is the sole supplier of potable water within the MSANK service area. MSANK proposes to collect background samples from sewer segments located in residential sections of Lower Burrell, the City of Arnold and the City of New Kensington. The background samples will be collected on the same days that the Influent/Effluent samples are collected.

The Headworks Analysis Sampling Plan revision consists of collecting ten background samples rather than two background samples. Four background samples will be collected from New Kensington, three background samples will be collected from the City of Arnold and three background samples will be collected from Lower Burrell.

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
JANUARY 1964

TO THE HONORABLE CHAIRMAN OF THE BOARD OF TRUSTEES
OF THE UNIVERSITY OF CHICAGO
FROM THE DEPARTMENT OF CHEMISTRY

RE: A REPORT ON THE PROGRESS OF THE RESEARCH
PROGRAM IN THE DEPARTMENT OF CHEMISTRY
DURING THE YEAR 1963

The Department of Chemistry at the University of Chicago
has been fortunate to have received a grant from the
National Science Foundation for the year 1963. This grant
has enabled the Department to continue its research program
in the field of organic chemistry. The following is a report
on the progress of the research program during the year 1963.

The research program in the Department of Chemistry
during the year 1963 has been directed towards the study
of the reaction of organic compounds with oxygen. The
results of this study are reported in the following paper.

3. Historical Sample Data

The Anaerobic Digestion and Ancillary System Project was substantially complete in October 2003. While this project had no impact on the characteristics of the Influent to the treatment plant, the recently completed project may have had an impact on the removal rates of the treatment plant. The use of historical data for Effluent and Sludge will be limited to data collected since October 2003, following substantial completion of the project. Since the project had no impact on Influent characteristics, historical Influent data collected prior to October 2003 is still proposed for use.

The Headworks Analysis Sampling Plan revision consists of limiting the use of historical data for Effluent and Sludge to that collected since October 2003.

4. Proposed Sample Data

Based on your recommendation, MSANK proposes to collect additional Influent and Effluent samples to aid in determining removal rates. The Headworks Analysis Sampling Plan revision consists of collecting ten samples of Influent and Effluent rather than five samples.

5. Sludge

Based on your recommendation, MSANK proposes to collect additional sludge samples to aid in determining removal rates. The Headworks Analysis Sampling Plan revision consists of collecting five samples of Sludge rather than one sample. The sludge will be collected from the belt filter press on days that Influent and Effluent samples are collected.

6. Analytical Methods

In response to your comments, MSANK proposes to revise the analytical methods to be used in the sampling for Cadmium, Chromium, Nickel and Molybdenum. Based on the expected levels of Copper and Zinc in the wastewater, EPA Method 200.7 is believed to provide sufficient detection levels for these parameters.

The Headworks Analysis Sampling Plan revision consists of changing the methods of analysis for Cadmium, Chromium, Nickel and Molybdenum from EPA 200.7 to EPA 200.8.

7. Schedule

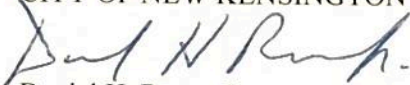
Due to revision of the original Headworks Analysis Sampling Plan, MSANK proposes to conduct the headworks analysis according to a revised schedule. The Headworks Analysis Sampling Plan revision consists of sample collection in March 2004, evaluation of sample collection data in April 2004, Headworks Analysis / Local Limits Reevaluation in May 2004 and Submission of Local Limits Reevaluation to EPA in June 2004.

8. Request for Approval

Based on these considerations, MSANK requests approval of the enclosed Headworks Analysis Sampling Plan – Revised February 2004.

Thank you for your consideration of this matter.

THE MUNICIPAL SANITARY AUTHORITY OF THE
CITY OF NEW KENSINGTON



Daniel H. Rowe, Jr.
Manager

Cc: Charles Brethauer – PaDEP
Stephen Polen, P.E. – HMM
Linda French – HMM

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I. HEADWORKS ANALYSIS SAMPLING PLAN-REVISED FEBRUARY 2004

A. Pollutants to be Evaluated

MSANK proposes to evaluate a total of 22 parameters as part of the Headworks Analysis. The Headworks Analysis evaluation will consist of the "standard ten" parameters including Arsenic, Cadmium, Chromium, Copper, Cyanide, Lead, Mercury, Nickel, Silver and Zinc. Molybdenum and Selenium will also be evaluated due to their inclusion in EPA's and Pennsylvania sludge quality program. MSANK also has local limitations for Carbonaceous Biochemical Oxygen Demand, Total Suspended Solids, Hexavalent Chromium, Oil and Grease and pH. Additionally, MSANK intends to evaluate Ammonia, Phosphorus, Phenol, Total Petroleum Hydrocarbon and Temperature parameters. No additional toxic pollutants are listed in the NPDES permit, nor have other priority pollutants been detected at significant levels during the priority pollutant scans conducted during the quarterly monitoring required by the Pretreatment Program.

B. Sampling Points

MSANK proposes the use of five sampling locations to conduct the Headworks Analysis. The proposed sampling locations are:

1. Raw Influent
2. Influent to Digester
3. Final Effluent
4. Background sample solely from domestic sources
5. Sludge

C. Number and Type of Sampling Events

1. Historical Sample Data

MSANK proposes the use of historical monitoring data to supplement the samples to be collected for the Headworks Analysis. The use of historical data for Effluent and Sludge will be limited to data collected since substantial completion of the Anaerobic Digestion and Ancillary Systems Project in October 2003. Since the project had no impact on influent characteristics, historical data collected prior to October 2003 will be used to supplement the proposed sample data for Influent.

2. Proposed Sample Data

In order to assess current plant conditions, MSANK proposes to supplement the referenced historical data by conducting sampling on a daily basis for a ten-day period. Grab samples will be collected for Cyanide, Hexavalent Chromium, Total Phenols, Oil and Grease and Total Petroleum Hydrocarbons. Temperature and pH will be evaluated through on-site testing procedures. All other parameters will be evaluated using 24-hour composite samples. Proposed sample data includes the following:

a. Raw Influent and Final Effluent

Ten, 24-hour composite samples of the Raw Influent and Final Effluent samples will be collected for analysis. These samples will be analyzed for the twenty-two parameters referenced previously.

b. Influent to Digester

A total of five daily grab samples of Influent to Digester will be collected and analyzed for the non-conservative parameter of Cyanide.

c. Background

Ten, 24-hour composite samples of Background wastewater from domestic sources will be analyzed for the twenty-two parameters referenced previously. Four samples will be collected from a background sampling location in New Kensington, three samples will be collected from a background sampling location in Arnold and three samples will be collected from Lower Burrell.

d. Sludge

Five samples of sludge will be collected from the belt filter press area at the treatment plant. In order to obtain a representative sample, grab samples of sludge will be collected and then combined to form a single composite sample of sludge that will be analyzed for the twenty-two parameters referenced previously. One composite sample of sludge will be collected per day, over a five-day period. Sludge samples will be collected on days when Influent and Effluent samples are being collected.

D. Analytical Methods/Detection Levels

MSANK proposes to conduct all pollutant analyses using EPA methodology with the most sensitive detection levels available for each method. A listing of the parameters and the proposed analytical methods are as follow:

Parameter	Analytical Method	Parameter	Analytical Method
Arsenic	SM18 3113B	Total Suspended Solids	SM18 2540D
Cadmium	EPA 200.8	Hexavalent Chromium	EPA 218.4
Chromium	EPA 200.8	Oil and Grease	EPA 1664A
Copper	EPA 200.7	pH	EPA 150.1
Cyanide	EPA 335.3	Ammonia	EPA 350.2
Lead	SM18 3113B	Phosphorus	EPA 365.1
Mercury	SM18 3112B	Phenol	EPA 420.2
Nickel	EPA 200.8	Total Petroleum Hydrocarbons	EPA 418.1
Silver	EPA 272.2	Carbonaceous Biochemical	EPA 405.1
Zinc	EPA 200.7	Oxygen Demand	
Molybdenum	EPA 200.8	Temperature	SM18 2550B
Selenium	SM18 3114B		

E. Schedule

MSANK proposes to conduct the required headworks analysis under the following schedule:

Sample Collection	March 2004
Evaluation of Sample Collection Data	April 2004
Headwork Analysis / Local Limits Reevaluation	May 2004
Submission of Local Limits Reevaluation to EPA	June 2004

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